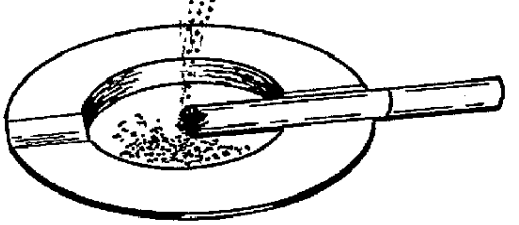
Federal Trade Commission

Report of

"TAR", NICOTINE AND CARBON MONOXIDE OF THE SMOKE OF 187 VARIETIES OF CIGARETTES



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REPORT OF "TAR", NICOTINE AND CARBON MONOXIDE CONTENT OF THE SMOKE OF 187 VARIETIES OF CIGARETTES

April 1981

The Federal Trade Commission's Laboratory has determined the "tar" (dry particular matter), total alkaloid (reported as nicotine) and carbon monoxide content of 187 varieties of cigarettes. The laboratory utilized the Cambridge filter method with the following specifications as set forth in the Commission's announcement of July 31, 1967:

1. Smoke cigarettes to a 23 mm. butt length, or to the length of the filter and overwrap plus 3 mm. if in excess of 23 mm.

2. Base results on a test of approximately 100 cigarettes per brand, or type.

3. Cigarettes to be tested will be selected on a random basis, as opposed to "weight selection".

4. Determine particulate matter on a "dry" basis employing the gas chromatography method published by C. H. Sloan and B. J. Sublett in Tobacco Science 9, page 70, 1965, as modified by F. J. Schultz' and A. W. Spears' report published in Tobacco Vol. 162, No. 24, page 32, dated June 17, 1966, to determine the moisture content.

5. Determine and report the "tar" content after subtracting moisture and alkoids (as nicotine) from particulate matter.

6. Carbon Monoxide is determined by non-dispersal infrared spectrophotometer.

Concerning the 187 varieties tested, 18 were capable of being smoked to 23 mm. The butt length of the other 169 varieties tested ranged from 24.5 mm. to an average of between 47.8 and 48.5 mm. The butt lengths of 146 of the 187 varieties tested exceed 30 mm.

The samples used were obtained by attempting to purchase two packages of each variety of cigarettes as distributed by domestic cigarette manufacturers during October and November 1979 in each of 50 geographic locations throughout the country. All varieties of cigarettes were not available in each of the 50 geographic locations and in these instances, one or more additional packages of cigarettes were purchased in those geographic locations where respective varieties were available. The samples utilized in the tests were representative of the 187 varieties of cigrettes as available throughout the country at the time of purchase.

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Due to the initiation of the carbon monoxide testing program, the length of the time between the pick up of the cigarettes tested for this report and the publication of the test results has been longer than normal. Every year some cigarette brands are reformulated, introduced or withdrawn from the market during the testing period. In light of the duration of the current testing period, the number of cigarette brands included in this report which have been reformulated since the cigarettes tested were picked up in late 1979 is higher than normal. The retesting of these brands prior to the issuance of this report would have resulted in a substantial delay in both the issuance of this report and the preparation and issuance of the next report later this year. However, to insure that both consumers and competitors are aware that some of the cigarettes tested for this report have been reformulated, this report also includes a list of those cigarettes which the manufacturers informed the Commission both have been reformulated and now have lower levels of "tar" and/or nicotine according to tests conducted by their manufacturer. Accordingly, consumers and cigarette manufacturers should note that the "tar," nicotine and carbon monoxide figures in the tables of this report for the following brands are based on tests conducted by the FTC on cigarettes which we are advised have subsequently been reformulated. The FTC has not independently verified the statements by the cigarette manufacturers that these brands have been reformulated or the test results submitted by the cigarette manufacturers and, therefore, by the publication of the list of reformulated cigarettes below, the Commission does not attest to the accuracy of the cigarette manufacturers' test results:

Camel, Regular size, non-filter
Camel, King size, filter
Camel Lights, King size, filter
Carlton, King size, filter
Chesterfield, Regular size, non-filter
Chesterfield, King size, non-filter
Chesterfield, King size, filter
Chesterfield, 100mm., filter
Half and Half, King size, filter
Kool Milds, King size, filter, menthol
Kool Super Lights, King size, filter, menthol
L&M, King size, filter
L&M, 100mm., filter
Lark, King size, filter
Lark, 100mm., filter
Marlboro Lights, King size, filter
Merit, King size, filter
Oasis, King size, filter, menthol
Pall Mall Lights, 100mm., filter
Salem, King size, filter, menthol
Salem, 100mm., filter, menthol
Salem Lights, King size, filter, menthol
St. Moritz, 100mm., filter
Tareyton Lights, King size, filter

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Tareyton Long Lights, 100mm., filter
Vantage, King size, filter
Vantage, King size, filter, menthol
Vantage, 100mm., filter
Virginia Slims Lights, 100mm., filter, menthol
Winston, King size, filter
Winston, 100mm., filter
Winston Lights, King size, filter

The degree of change in the reported "tar," nicotine and carbon monoxide level of those brands listed above varies from brand to brand. In some cases the change as reported by the respective cigarette manufacturer is only 1 milligram tar and/or .1 of a milligram nicotine. In other cases the change is larger. To obtain information on the current "tar" and nicotine levels of these cigarettes according to the manufacturer, consumers and cigarette manufacturers should check the most current advertisements for those brands.

In the table listing the cigarette varieties in alphabetical order the "tar" and carbon monoxide content is reported to the nearest 1/10 milligram and the nicotine to the nearest 1/100 milligram, each with appropriate statistical values. The average weight is reported in grams per cigarette and the butt length range to the nearest 1/10 millimeter. In all other tables the average weight and butt length columns and the figures representing the standard deviation of the mean have been eliminated. The "tar" and carbon monoxide figures have been rounded to the nearest milligram (0.5 milligrams and greater rounded up, 0.4 milligrams and less rounded down) and the nicotine figures have been rounded to the nearest tenth of a milligram (0.05 milligrams and greater rounded up, 0.04 milligrams and less rounded down). Three tables respectively list varieties in increasing order of "tar" values, in increasing order of nicotine values and in increasing order of carbon monoxide values. Accordingly, "tar," nicotine and carbon monoxide figures in the tables and list represent rounded off averages without indication of their precision.

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We were informed that the formulation of two varieties of True and two varieties of Golden Lights cigarettes were changed and samples were collected according to the prescribed procedure. Results yielded by the new formulation appear in the body of the tables. In some locations the older formulation may still be found and the results yielded are as follows:

BRAND	TYPE	TPM dry mg/cig		NICOTINE mg/cig		CARBON MONOXIDE mg/cig	
True	100mm, fil.	9.1	7.6	0.69	0.59	12.0	9.7
True	100mm, fil. men.	9.7	7.2	0.70	0.57	13.1	9.8
Golden Lights 100's	100mm, fil.	8.6	8.4	0.79	0.73	9.3	9.1
Golden Lights 100's	100mm, fil. men.	8.5	8.1	0.80	0.74	10.2	9.3

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TAR(1), NICOTINE(2) AND CARBON MONOXIDE OF ONE-HUNDRED EIGHTY-SEVEN (187) DOMESTIC CIGARETTES

BRAND	TYPE(3)	AVERAGE WEIGHT(4)	BUTT LENGTH(5)	TPM DRY(1)*	NICOTINE*	CARBON MONOXIDE
Alpine	F, M, SP 85 mm	0.9917	27.9 - 30.2 mm	14.7 ± 0.2	0.96 ± 0.04	15.8 ± 0.4
American Lights	F, SP 120 mm	1.1640	47.7 - 48.3 mm	7.7 ± 0.3	0.67 ± 0.03	8.6 ± 0.5
American Lights	F, M, SP 120 mm	1.0814	47.8 - 48.5 mm	8.9 ± 0.3	0.82 ± 0.04	9.8 ± 0.4
Arctic Lights	F, M, SP 85 mm	1.0390	31.9 - 34.2 mm	8.2 ± 0.2	0.69 ± 0.04	10.3 ± 0.4
Arctic Lights	F, M, SP 100 mm	1.2046	34.0 - 36.8 mm	8.4 ± 0.5	0.74 ± 0.04	10.9 ± 0.6
Aspen	F, M, SP 85 mm	0.9009	34.2 - 35.8 mm	8.8 ± 0.4	0.81 ± 0.02	11.1 ± 0.5
Aspen	F, M, SP 100 mm	1.0550	36.2 - 39.1 mm	8.6 ± 0.5	0.83 ± 0.03	10.3 ± 0.7
Belair	F, M, SP 85 mm	0.9801	31.3 - 33.9 mm	9.1 ± 0.3	0.82 ± 0.02	11.3 ± 0.4
Belair	F, M, SP 100 mm	1.1924	36.9 - 40.6 mm	8.2 ± 0.2	0.65 ± 0.04	10.2 ± 0.5
Benson & Hedges	Reg. F, SP 70 mm	0.9489	32.8 - 33.7 mm	0.6 ± 0.1	0.12 ± 0.01	1.3 ± 0.1
Benson & Hedges	F, HP 85 mm	1.0014	32.2 - 33.3 mm	15.6 ± 0.6	1.31 ± 0.05	14.5 ± 0.7
Benson & Hedges 100's	F, HP 100 mm	1.1213	33.8 - 35.8 mm	15.5 ± 0.4	1.11 ± 0.03	17.4 ± 0.5
Benson & Hedges 100's	F, M, HP 100 mm	1.0992	33.9 - 36.4 mm	15.8 ± 0.3	1.12 ± 0.03	17.7 ± 0.5
Benson & Hedges 100's	F, SP 100 mm	1.1096	34.0 - 35.9 mm	15.9 ± 0.5	1.13 ± 0.04	17.6 ± 0.7
Benson & Hedges 100's	F, M, SP 100 mm	1.1174	33.8 - 36.0 mm	15.7 ± 0.4	1.15 ± 0.04	18.0 ± 0.5
Benson & Hedges Lights	F, SP 100 mm	1.1352	37.4 - 40.0 mm	9.7 ± 0.5	0.77 ± 0.03	13.7 ± 0.5
Benson & Hedges Lights	F, M, SP 100 mm	1.1245	37.0 - 40.2 mm	9.8 ± 0.3	0.76 ± 0.04	12.9 ± 0.7
Brookwood	F, M, SP 85 mm	0.9215	32.5 - 33.8 mm	7.3 ± 0.3	0.71 ± 0.02	8.2 ± 0.3
Bull Durham	F, SP 85 mm	1.1697	25.9 - 28.2 mm	27.3 ± 0.5	1.82 ± 0.07	26.3 ± 0.9
Camel **	Reg. NF, SP 70 mm	0.8797	23 mm	25.2 ± 0.8	1.86 ± 0.05	18.5 ± 0.8
Camel **	F, SP 85 mm	0.9607	27.4 - 28.5 mm	18.7 ± 0.4	1.36 ± 0.03	20.6 ± 0.5
Camel Lights **	F, SP 85 mm	0.9350	32.9 - 33.9 mm	10.0 ± 0.4	0.90 ± 0.02	12.2 ± 1.0
Camel Long Lights	F, SP 100 mm	1.1099	36.8 - 37.8 mm	12.2 ± 0.3	0.97 ± 0.05	15.8 ± 0.5
Carlton	F, HP 85 mm	0.7872	31.5 - 34.5 mm	0.1 ± 0.1	0.06 ± 0.01	0.5 ± 0.1
Carlton **	F, SP 85 mm	0.7835	32.0 - 34.0 mm	0.8 ± 0.1	0.13 ± 0.01	1.9 ± 0.2
Carlton	F, M, SP 85 mm	0.7771	31.5 - 34.4 mm	0.5 ± 0.1	0.11 ± 0.01	1.3 ± 0.1
Carlton 100 s	F, SP 100 mm	0.9300	33.8 - 36.5 mm	4.0 ± 0.2	0.39 ± 0.05	6.3 ± 0.4
Carlton 100 s	F, M, SP 100 mm	0.9387	32.7 - 36.6 mm	3.8 ± 0.4	0.36 ± 0.03	6.0 ± 0.5
Chesterfield **	Reg. NF, SP 70 mm	0.8795	23 mm	22.7 ± 0.5	1.41 ± 0.05	16.1 ± 0.4
Chesterfield **	NF, SP 85 mm	1.0490	23 mm	27.1 ± 0.7	1.68 ± 0.06	19.8 ± 0.7
Chesterfield **	F, SP 85 mm	0.9076	27.9 - 29.7 mm	14.7 ± 0.4	1.01 ± 0.02	16.5 ± 0.5
Chesterfield **	F, SP 101 mm	1.0748	34.1 - 36.1 mm	16.0 ± 0.5	1.12 ± 0.03	18.5 ± 0.7
Decade	F, SP 85 mm	0.8708	32.3 - 33.7 mm	4.7 ± 0.4	0.41 ± 0.02	3.6 ± 0.3
Decade	F, M, SP 85 mm	0.8889	32.3 - 34.0 mm	4.4 ± 0.2	0.41 ± 0.02	3.3 ± 0.2
Decade	F, SP 100 mm	1.0119	37.0 - 39.8 mm	8.6 ± 0.3	0.74 ± 0.03	7.6 ± 0.3
Doral	F, SP 85 mm	1.0988	32.5 - 34.0 mm	12.4 ± 0.4	0.94 ± 0.06	12.4 ± 0.4
Doral	F, M, SP 85 mm	1.0622	32.2 - 34.0 mm	12.0 ± 0.5	0.95 ± 0.04	12.4 ± 0.6
Doral II	F, SP 85 mm	1.0513	36.0 - 39.0 mm	4.7 ± 0.2	0.42 ± 0.03	4.4 ± 0.3
Doral II	F, M, SP 85 mm	1.0482	36.0 - 38.0 mm	5.1 ± 0.3	0.43 ± 0.03	4.8 ± 0.4
DuMaurier	F, HP 85 mm	1.0254	28.2 - 29.8 mm	14.3 ± 0.3	0.97 ± 0.03	19.0 ± 0.5
English Ovals	Reg. NF, HP 70 mm	0.9125	23 mm	22.0 ± 0.6	1.74 ± 0.04	13.2 ± 0.5
English Ovals	NF, HP 85 mm	1.1505	23 mm	27.8 ± 0.6	2.25 ± 0.07	15.6 ± 1.0
Eve	F, SP 100 mm	1.0597	33.7 - 35.8 mm	15.1 ± 0.5	1.14 ± 0.05	17.2 ± 0.6
Eve	F, M, SP 100 mm	1.0688	34.3 - 36.0 mm	14.6 ± 0.4	1.06 ± 0.04	16.4 ± 0.3
Eve	F, HP 120 mm	1.0053	37.0 - 39.0 mm	13.6 ± 0.8	1.05 ± 0.03	13.6 ± 0.5
Eve	F, M, HP 120 mm	0.9910	36.5 - 39.5 mm	12.2 ± 0.4	0.97 ± 0.04	12.4 ± 0.6
Fatima	NF, SP 85 mm	1.0419	23 mm	26.3 ± 0.7	1.67 ± 0.06	19.5 ± 0.6
Galaxy	F, SP 85 mm	1.0740	32.6 - 33.9 mm	16.1 ± 0.5	1.04 ± 0.03	18.3 ± 0.9
Golden Lights	F, SP 85 mm	0.8866	33.6 - 36.3 mm	8.2 ± 0.3	0.77 ± 0.03	9.1 ± 0.6
Golden Lights	F, M, SP 85 mm	0.9144	34.1 - 35.6 mm	7.6 ± 0.3	0.68 ± 0.04	8.7 ± 0.4
Golden Lights 100's	F, SP 100 mm	1.0417	33.1 - 36.3 mm	8.4 ± 0.4	0.73 ± 0.04	9.1 ± 0.6
Golden Lights 100's	F, M, SP 100 mm	1.0473	34.1 - 35.7 mm	8.1 ± 0.3	0.74 ± 0.03	9.3 ± 0.6
Half & Half **	F, SP 85 mm	1.1460	26.4 - 27.6 mm	20.3 ± 0.7	1.64 ± 0.05	18.0 ± 0.6
Herbert Tareyton	NF, SP 85 mm	1.1248	23 mm	26.8 ± 0.7	1.73 ± 0.04	20.4 ± 0.7
Home Run	Reg. NF, SP 70 mm	0.8602	23 mm	21.1 ± 0.7	1.28 ± 0.05	21.1 ± 0.9
Iceberg 100's	F, M, SP 100 mm	0.9523	33.5 - 38.1 mm	2.9 ± 0.3	0.27 ± 0.02	4.9 ± 0.4
Kent Micronite II	F, HP 80 mm	0.8982	27.4 - 29.4 mm	12.3 ± 0.3	0.96 ± 0.03	13.1 ± 0.6
Kent Micronite II	F, SP 85 mm	0.9324	27.1 - 30.2 mm	12.5 ± 0.4	0.99 ± 0.02	13.6 ± 0.5
Kent III	F, SP 85 mm	0.8384	34.8 - 35.9 mm	2.7 ± 0.2	0.34 ± 0.02	3.6 ± 0.2
Kent Micronite II	F, SP 100 mm	1.0550	34.1 - 36.2 mm	14.5 ± 0.4	1.14 ± 0.03	15.2 ± 0.5
Kent Micronite II	F, M, SP 100 mm	1.0353	34.2 - 37.0 mm	14.3 ± 0.4	1.21 ± 0.04	14.7 ± 0.5

** These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

2 Milligrams total alkaloids reported as nicotine

3 F-filter; NF-non-filter; M-menthol; HP-hard pack; SP-soft pack; mm-millimeter

4 Average weight reported in grams

5 Range used in butt length because of variance of overwrap

* Tolerance shown is twice the variance

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TAR(1), NICOTINE(2) AND CARBON MONOXIDE OF ONE-HUNDRED EIGHTY-SEVEN (187) DOMESTIC CIGARETTES

BRAND	TYPE(3)	AVERAGE WEIGHT(4)	BUTT LENGTH (5)	TPM DRY(1)*	NICOTINE*	CARBON MONOXIDE
Kent III	F, SP 100 mm	0.9939	37.0 - 39.0 mm	4.3 ± 0.2	0.48 ± 0.03	7.0 ± 0.3
Kool	Reg.NF,M,SP 70 mm	0.8839	23 mm	18.2 ± 0.6	1.13 ± 0.05	15.5 ± 0.6
Kool	F, M, HP 80 mm	0.9315	24.5 - 27.0 mm	16.0 ± 0.3	1.27 ± 0.03	18.3 ± 0.4
Kool	F, M, SP 85 mm	0.9509	28.2 - 30.7 mm	15.5 ± 0.4	1.20 ± 0.03	18.6 ± 0.7
Kool Milds **	F, M, SP 85 mm	0.9358	31.2 - 34.1 mm	11.5 ± 0.3	0.89 ± 0.02	14.3 ± 0.7
Kool Super Lights **	F, M, SP 85 mm	0.9601	32.0 - 34.2 mm	7.2 ± 0.3	0.59 ± 0.05	8.6 ± 0.5
Kool	F, M, SP 100 mm	1.1213	33.6 - 36.3 mm	15.1 ± 0.4	1.11 ± 0.04	19.4 ± 0.4
Kool Milds	F, M, SP 100 mm	1.1156	38.0 - 40.3 mm	12.4 ± 0.2	1.04 ± 0.03	14.6 ± 0.5
Kool Super Lights	F, M, SP 100 mm	1.1935	37.9 - 39.9 mm	8.4 ± 0.5	0.68 ± 0.03	10.9 ± 0.7
Kool International	F, M, HP 100 mm	1.1461	31.9 - 43.2 mm	8.5 ± 0.4	0.68 ± 0.02	10.9 ± 0.8
L & M	F, HP 80 mm	0.8795	25.9 - 27.5 mm	15.0 ± 0.3	0.97 ± 0.03	16.7 ± 0.5
L & M **	F, SP 85 mm	0.9129	28.1 - 30.0 mm	15.3 ± 0.3	1.04 ± 0.04	17.5 ± 0.3
L & M Lights	F, SP 85 mm	0.8833	31.5 - 33.5 mm	7.6 ± 0.3	0.68 ± 0.03	5.6 ± 0.4
L & M **	F, SP 100 mm	1.0501	33.6 - 35.6 mm	15.6 ± 0.7	1.10 ± 0.05	18.3 ± 1.0
L & M Lights	F, SP 100 mm	1.0225	36.9 - 38.7 mm	8.0 ± 0.4	0.73 ± 0.03	6.2 ± 0.4
L & M	F, M, SP 100 mm	1.0717	33.8 - 35.8 mm	16.3 ± 0.3	1.14 ± 0.03	18.4 ± 0.4
Lark **	F, SP 85 mm	1.0635	27.6 - 29.5 mm	16.0 ± 0.5	1.11 ± 0.04	17.4 ± 0.6
Lark II	F, SP 85 mm	0.8216	31.4 - 34.0 mm	7.8 ± 0.2	0.63 ± 0.02	8.2 ± 0.3
Lark Lights	F, SP 85 mm	0.8224	32.0 - 33.7 mm	7.5 ± 0.4	0.60 ± 0.03	8.4 ± 0.4
Lark 100's **	F, SP 100 mm	0.1663	31.2 - 33.8 mm	17.0 ± 0.5	1.19 ± 0.04	19.2 ± 0.8
Lark Lights 100's	F, SP 100 mm	0.9709	36.1 - 38.5 mm	7.5 ± 0.3	0.61 ± 0.03	8.1 ± 0.5
Long Johns	F, SP 120 mm	1.2172	35.4 - 39.2 mm	16.5 ± 0.5	1.33 ± 0.03	19.5 ± 0.9
Long Johns	F, M, SP 120 mm	1.1821	36.9 - 39.0 mm	14.3 ± 0.4	1.22 ± 0.06	18.1 ± 0.8
Lucky Strike	Reg, NF, SP 70 mm	0.9237	23 mm	22.5 ± 0.5	1.32 ± 0.04	18.8 ± 0.5
Lucky Ten	F, SP 85 mm	0.9705	31.9 - 34.5 mm	8.5 ± 0.3	0.64 ± 0.03	10.9 ± 0.5
Lucky 100's	F, SP 100 mm	0.9546	32.5 - 39.1 mm	3.0 ± 0.2	0.30 ± 0.03	5.3 ± 0.3
Marlboro	F, HP 80 mm	0.9437	25.5 - 27.5 mm	15.5 ± 0.3	1.04 ± 0.03	16.4 ± 0.3
Marlboro	F, M, HP 80 mm	0.9559	25.3 - 26.6 mm	14.5 ± 0.4	0.96 ± 0.04	14.6 ± 0.5
Marlboro	F, SP 85 mm	0.9830	27.0 - 29.0 mm	16.2 ± 0.3	1.09 ± 0.02	17.6 ± 0.4
Marlboro Lights **	F, SP 85 mm	0.9888	34.0 - 35.0 mm	11.2 ± 0.3	0.82 ± 0.04	14.2 ± 0.5
Marlboro	F, M, SP 85 mm	0.9790	28.8 - 29.4 mm	14.1 ± 0.4	0.92 ± 0.03	15.7 ± 0.4
Marlboro	F, HP 100 mm	1.0996	33.8 - 36.2 mm	15.6 ± 0.4	1.11 ± 0.03	17.1 ± 0.8
Marlboro	F, SP 100 mm	1.1164	33.8 - 35.6 mm	15.9 ± 0.4	1.10 ± 0.04	17.6 ± 0.6
Marlboro Lights	F, SP 100 mm	1.1224	38.0 - 40.2 mm	10.6 ± 0.3	0.78 ± 0.02	14.7 ± 0.6
START HERE Max	F, SP 120 mm	1.0091	37.0 - 38.3 mm	17.5 ± 0.4	1.51 ± 0.05	18.2 ± 0.6
Max	F, M, SP 120 mm	1.0072	36.0 - 39.3 mm	17.8 ± 0.4	1.52 ± 0.06	18.5 ± 0.5
Merit **	F, SP 85 mm	0.9889	33.2 - 36.1 mm	7.7 ± 0.2	0.57 ± 0.02	11.5 ± 0.5
Merit	F, M, SP 85 mm	0.9943	34.0 - 35.5 mm	7.3 ± 0.3	0.54 ± 0.01	11.4 ± 0.3
Merit	F, SP 100 mm	1.1282	38.0 - 40.2 mm	9.2 ± 0.3	0.72 ± 0.02	12.4 ± 0.4
Merit	F, M, SP 100 mm	1.1225	39.0 - 40.0 mm	9.9 ± 0.4	0.75 ± 0.03	13.0 ± 0.5
Montclair	F, M, SP 85 mm	0.9297	26.3 - 28.3 mm	15.6 ± 0.4	1.04 ± 0.04	17.7 ± 0.5
More	F, SP 120 mm	1.0341	35.7 - 37.2 mm	21.8 ± 0.5	1.75 ± 0.06	25.6 ± 1.3
More	F, M, SP 120 mm	1.0391	35.9 - 38.0 mm	21.5 ± 0.4	1.78 ± 0.04	26.2 ± 0.8
Multifilter	F, SP 85 mm	1.1494	32.8 - 34.2 mm	11.2 ± 0.3	0.81 ± 0.03	11.9 ± 0.6
Multifilter	F, M, SP 85 mm	1.1336	32.1 - 33.9 mm	11.8 ± 0.5	0.78 ± 0.05	12.5 ± 0.4
Newport	F, M, HP 80 mm	0.8988	27.8 - 29.5 mm	15.5 ± 0.4	1.19 ± 0.03	17.5 ± 0.7
Newport	F, M, SP 85 mm	0.9262	27.2 - 29.3 mm	16.6 ± 0.5	1.29 ± 0.02	19.4 ± 0.5
Newport Lights	F, M, SP 85 mm	0.8737	34.0 - 35.5 mm	9.7 ± 0.4	0.86 ± 0.03	11.6 ± 0.6
Newport	F, M, SP 100 mm	1.0660	33.8 - 36.5 mm	19.8 ± 0.3	1.57 ± 0.05	22.6 ± 0.6
Now	F, HP 85 mm	0.8000	32.2 - 34.2 mm	1.6 ± 0.2	0.19 ± 0.02	2.6 ± 0.1
Now	F, SP 85 mm	0.8199	32.2 - 34.0 mm	2.0 ± 0.2	0.25 ± 0.03	3.1 ± 0.2
Now	F, M, HP 85 mm	0.8038	32.2 - 33.6 mm	2.0 ± 0.2	0.21 ± 0.02	2.9 ± 0.2
Now	F, M, SP 85 mm	0.8017	32.3 - 33.8 mm	1.8 ± 0.2	0.23 ± 0.03	2.9 ± 0.2
Onsis **	F, M, SP 85 mm	0.9071	27.3 - 29.3 mm	15.5 ± 0.4	1.07 ± 0.04	16.6 ± 0.4
Old Gold Straights	NF, SP 85 mm	0.9983	23 mm	25.2 ± 0.7	1.64 ± 0.06	19.2 ± 0.6
Old Gold Filters	F, SP 85 mm	0.9445	27.1 - 30.0 mm	16.5 ± 0.3	1.27 ± 0.04	19.2 ± 0.5
Old Gold Lights	F, SP 85 mm	0.8966	33.0 - 36.6 mm	9.3 ± 0.2	0.81 ± 0.04	10.9 ± 0.4
Old Gold 100's	F, SP 100 mm	1.0178	34.0 - 35.7 mm	18.5 ± 0.5	1.47 ± 0.05	20.2 ± 0.5
Pall Mall	NF, SP 85 mm	1.0633	23 mm	23.5 ± 0.5	1.51 ± 0.05	18.6 ± 0.5

** These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water
2 Milligrams total alkaloids reported as nicotine
3 F-filter; NF-non-filter; M-menthol; HP-hard pack; SP-soft pack; mm-millimeter
4 Average weight reported in grams
5 Range used for butt length because of variance of overwrap
* Tolerance shown is two (2) standard deviation of the mean

PM3001059420

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

TAR(1), NICOTINE(2) AND CARBON MONOXIDE OF ONE HUNDRED EIGHTY-SEVEN (187) DOMESTIC CIGARETTES

BRAND	TYPE(3)	AVERAGE WEIGHT(4)	BUTT LENGTH(5)	TPM DRY(1)*	NICOTINE*	CARBON MONOXIDE
Pall Mall	F, SP 85 mm	0.9714	25.6 - 28.0 mm	16.9 ± 0.4	1.11 ± 0.03	19.5 ± 0.8
Pall Mall Extra Lights	F, SP 85 mm	0.9848	31.7 - 34.3 mm	6.5 ± 0.4	0.58 ± 0.05	7.9 ± 0.5
Pall Mall	F, SP 100 mm	1.1597	34.1 - 36.1 mm	17.0 ± 0.4	1.26 ± 0.04	18.5 ± 0.7
Pall Mall Lights **	F, SP 100 mm	1.0773	36.5 - 38.9 mm	11.3 ± 0.3	0.89 ± 0.03	12.8 ± 0.3
Pall Mall Lights	F, M, SP 100 mm	1.0149	33.9 - 36.2 mm	12.1 ± 0.4	0.97 ± 0.05	13.3 ± 0.6
Parliament Lights	F, HP 80 mm	0.9468	32.9 - 33.9 mm	8.4 ± 0.3	0.61 ± 0.03	10.2 ± 0.4
Parliament Lights	F, SP 85 mm	1.0102	31.0 - 34.5 mm	9.2 ± 0.3	0.72 ± 0.03	11.3 ± 0.6
Parliament Lights 100's	F, SP 100 mm	1.2464	38.3 - 40.6 mm	11.4 ± 0.3	0.91 ± 0.03	11.6 ± 0.4
Philip Morris	NF, SP 70 mm	0.8583	23 mm	21.6 ± 0.5	1.47 ± 0.05	13.8 ± 0.4
Philip Morris Commander	NF, SP 85 mm	1.0273	23 mm	25.4 ± 0.9	1.66 ± 0.06	16.7 ± 0.9
Philip Morris International	F, HP 100 mm	1.1259	33.1 - 35.8 mm	17.5 ± 0.5	1.21 ± 0.03	19.8 ± 0.6
Philip Morris International	F, M, HP 100 mm	1.0868	34.2 - 35.6 mm	17.0 ± 0.4	1.12 ± 0.04	19.0 ± 0.6
Picayune	Reg. NF, SP 70 mm	0.8656	23 mm	22.4 ± 0.6	1.36 ± 0.05	21.7 ± 0.5
Piedmont	Reg. NF, SP 70 mm	0.8746	23 mm	21.6 ± 0.6	1.31 ± 0.03	14.8 ± 0.5
Players	Reg. NF, HP 70 mm	1.0304	23 mm	23.8 ± 0.5	1.89 ± 0.05	15.4 ± 0.5
Raleigh	NF, SP 85 mm	1.0571	23 mm	22.7 ± 0.6	1.35 ± 0.04	19.0 ± 0.7
Raleigh	F, SP 85 mm	1.0070	28.0 - 30.3 mm	15.2 ± 0.4	0.98 ± 0.04	19.3 ± 0.6
Raleigh Lights	F, SP 85 mm	0.9823	31.5 - 33.9 mm	8.5 ± 0.4	0.70 ± 0.04	11.2 ± 0.4
Raleigh	F, SP 100 mm	0.1449	33.7 - 36.2 mm	16.0 ± 0.3	1.14 ± 0.04	20.4 ± 0.5
Raleigh Lights 100's	F, SP 100 mm	0.1958	38.7 - 40.0 mm	8.4 ± 0.4	0.77 ± 0.05	11.7 ± 0.5
Real	F, SP 85 mm	0.9434	32.8 - 34.0 mm	9.7 ± 0.3	0.86 ± 0.04	11.7 ± 0.4
Real	F, M, SP 85 mm	0.9223	32.0 - 34.0 mm	8.7 ± 0.3	0.81 ± 0.03	10.0 ± 0.5
St. Moritz **	F, SP 100 mm	1.0435	35.4 - 37.4 mm	14.6 ± 0.4	1.10 ± 0.05	15.8 ± 0.5
St. Moritz	F, M, SP 100 mm	1.0554	35.3 - 37.4 mm	14.1 ± 0.3	1.07 ± 0.04	15.3 ± 0.7
Salem	F, M, HP 80 mm	0.9795	24.9 - 27.1 mm	16.2 ± 0.3	1.16 ± 0.03	18.5 ± 0.4
Salem **	F, M, SP 85 mm	0.9834	27.0 - 28.9 mm	16.1 ± 0.4	1.15 ± 0.03	18.6 ± 0.7
Salem Lights **	F, M, SP 85 mm	0.9444	31.4 - 34.0 mm	10.9 ± 0.3	0.87 ± 0.02	13.9 ± 0.5
Salem **	F, M, SP 100 mm	1.1466	33.5 - 35.2 mm	19.0 ± 0.5	1.46 ± 0.05	20.0 ± 0.6
Salem Lights	F, M, SP 100 mm	1.1398	33.7 - 35.4 mm	11.2 ± 0.3	0.97 ± 0.02	12.7 ± 0.4
Saratoga	F, HP, 120 mm	1.0953	37.6 - 38.7 mm	15.4 ± 0.3	1.12 ± 0.04	18.1 ± 0.5
Saratoga	F, M, HP 120 mm	1.0818	37.1 - 38.5 mm	14.8 ± 0.3	1.06 ± 0.04	16.7 ± 0.6
Silva Thins	F, SP 100 mm	0.9722	33.6 - 36.3 mm	12.7 ± 0.2	1.07 ± 0.05	11.7 ± 0.5
Silva Thins	F, M, SP 100 mm	1.0550	33.1 - 36.6 mm	11.3 ± 0.4	0.90 ± 0.03	11.3 ± 0.4
Spring 100 s	F, M, SP 100 mm	1.0959	32.6 - 36.8 mm	18.5 ± 0.5	1.12 ± 0.05	19.1 ± 0.6
Tall	F, SP 120 mm	1.0271	36.9 - 39.4 mm	16.4 ± 0.5	1.34 ± 0.04	20.6 ± 1.3
Tall	F, M, SP 120 mm	1.1871	36.7 - 40.3 mm	15.1 ± 0.5	1.22 ± 0.06	18.4 ± 1.1
Tareyton	F, SP 85 mm	1.0349	26.1 - 28.0 mm	13.8 ± 0.4	0.93 ± 0.03	17.4 ± 0.4
Tareyton Lights **	F, SP 85 mm	1.0881	33.4 - 37.3 mm	7.0 ± 0.3	0.60 ± 0.05	8.8 ± 0.5
Tareyton Ultra Low Tar	F, M, SP 85 mm	0.9050	33.0 - 37.0 mm	1.2 ± 0.2	0.16 ± 0.02	1.5 ± 0.1
Tareyton	F, SP 100 mm	1.1642	34.0 - 36.3 mm	13.6 ± 0.3	0.97 ± 0.03	18.2 ± 0.4
Tareyton Lights **	F, SP 100 mm	1.1663	33.2 - 36.6 mm	7.2 ± 0.5	0.64 ± 0.07	8.8 ± 0.6
Tempo	F, SP 85 mm	1.0423	32.2 - 34.2 mm	6.8 ± 0.3	0.55 ± 0.02	9.2 ± 0.5
Triumph	F, SP 85 mm	0.8404	34.1 - 35.9 mm	2.8 ± 0.2	0.38 ± 0.03	3.6 ± 0.3
Triumph	F, M, SP 85 mm	0.8451	34.4 - 35.8 mm	2.6 ± 0.2	0.35 ± 0.03	3.2 ± 0.2
True	F, SP 85 mm	0.8282	32.5 - 34.0 mm	4.9 ± 0.2	0.43 ± 0.03	5.9 ± 0.3
True	F, M, SP 85 mm	0.8291	32.0 - 34.0 mm	4.9 ± 0.2	0.45 ± 0.03	6.1 ± 0.2
True	F, SP 100 mm	1.0166	31.6 - 33.0 mm	7.6 ± 0.4	0.59 ± 0.03	9.7 ± 0.4
True	F, M, SP 100 mm	1.0150	31.2 - 33.1 mm	7.2 ± 0.4	0.57 ± 0.01	9.8 ± 0.4
Twist	F, L/M, SP 100 mm	1.1001	33.6 - 36.1 mm	15.7 ± 0.5	1.24 ± 0.04	17.5 ± 0.4
Vantage **	F, SP 85 mm	1.0540	32.8 - 33.6 mm	10.5 ± 0.2	0.82 ± 0.02	16.6 ± 0.5
Vantage **	F, M, SP 85 mm	1.0913	31.8 - 34.5 mm	10.4 ± 0.2	0.81 ± 0.02	16.8 ± 0.4
Vantage Ultra Lights	F, SP 85 mm	0.9916	32.3 - 33.5 mm	6.3 ± 0.3	0.54 ± 0.02	9.5 ± 0.4
Vantage **	F, SP 100 mm	1.2460	33.5 - 35.3 mm	11.1 ± 0.4	0.91 ± 0.03	16.4 ± 0.4
Viceroy	F, SP 85 mm	0.9645	28.5 - 30.3 mm	14.7 ± 0.4	0.99 ± 0.05	18.8 ± 0.6
Viceroy Rich Lights	F, SP 85 mm	1.0235	31.6 - 35.0 mm	8.3 ± 0.3	0.69 ± 0.03	10.8 ± 0.4
Viceroy	F, SP 100 mm	1.0936	34.0 - 35.9 mm	15.4 ± 0.5	1.15 ± 0.04	19.7 ± 0.9
Viceroy Rich Lights	F, SP 100 mm	1.1883	37.9 - 39.8 mm	8.2 ± 0.3	0.71 ± 0.03	11.8 ± 0.4
Virginia Slims	F, SP 100 mm	0.9703	34.4 - 36.0 mm	14.8 ± 0.5	0.99 ± 0.05	16.0 ± 0.7
Virginia Slims	F, M, SP 100 mm	0.9573	33.5 - 36.2 mm	14.4 ± 0.3	0.99 ± 0.03	16.1 ± 0.4
Virginia Slims Lights	F, HP 100 mm	0.9330	38.4 - 40.1 mm	8.3 ± 0.3	0.62 ± 0.02	9.7 ± 0.6

** These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water
2 Milligrams total alkaloids reported as nicotine
3 F-filter; NF-non-filter; M-menthol; L-lemon; HP-hard pack; SP-soft pack; mm-millimeter
4 Average weight reported in grams
5 Range used in butt length because of variance of overwrap
* Tolerance shown is two (2) standard deviation of the mean

PM3001059421

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

TAR(1), NICOTINE(2) AND CARBON MONOXIDE OF ONE-HUNDRED EIGHTY-SEVEN (187) DOMESTIC CIGARETTES

BRAND	TYPE(3)	AVERAGE WEIGHT(4)	BUTT LENGTH(5)	TPM(1)*	NICOTINE*	CARBON MONOXIDE
Virginia Slims Lights HP	F, M, ~~SP~~ 100 mm	0.9415	38.5 - 39.8 mm	8.6 ± 0.3	0.67 ± 0.02	11.0 ± 0.4
Winston	F, HP 80 mm	0.9597	25.1 - 26.6 mm	17.5 ± 0.5	1.29 ± 0.06	18.5 ± 0.5
Winston **	F, SP 85 mm	0.9774	26.6 - 28.6 mm	19.0 ± 0.5	1.42 ± 0.04	20.7 ± 0.7
Winston Lights **	F, SP 85 mm	0.9493	31.3 - 35.3 mm	13.3 ± 0.4	1.05 ± 0.04	15.3 ± 0.6
Winston 100's **	F, SP 100 mm	1.1225	34.5 - 36.0 mm	18.4 ± 0.5	1.38 ± 0.05	20.5 ± 0.5
Winston Lights 100's	F, SP 100 mm	1.1269	36.0 - 38.0 mm	12.6 ± 0.3	0.98 ± 0.04	16.6 ± 0.5
Winston 100's	F, M, SP 100 mm	1.1431	33.9 - 38.1 mm	17.1 ± 0.4	1.32 ± 0.04	18.1 ± 0.9

** These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water
2 Milligrams total alkaloids reported as nicotine
3 F-filter; NF-non-filter; M-menthol; HP-hard pack; SP-soft pack; mm-millimeter
4 Average weight reported in grams
5 Range used in butt length because of variance of overwrap
* Tolerance shown is two (2) standard deviation of the mean

PM3001059422

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187) Varieties of Domestic Cigarettes
(shown in increasing order of tar values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Carlton	king size, filter, (hard pack)	<0.5	0.06	0.5
Carlton	king size, filter, menthol	1	0.1	1
Benson & Hedges	reg. size, filter, (hard pack)	1	0.1	1
Carlton *	king size, filter	1	0.1	2
Tareyton Ultra Low Tar	king size, filter, menthol	1	0.2	1
Now	king size, filter, (hard pack)	2	0.2	3
Now	king size, filter, menthol	2	0.2	3
Now	king size, filter, menthol, (hard pack)	2	0.2	3
Now	king size, filter	2	0.3	3
Triumph	king size, filter, menthol	3	0.4	3
Kent III	king size, filter	3	0.3	4
Triumph	king size, filter	3	0.4	4
Iceberg 100's	100 mm, filter, menthol	3	0.3	5
Lucky 100's	100 mm, filter	3	0.3	5
Carlton 100's	100 mm, filter, menthol	4	0.4	6
Carlton 100's	100 mm, filter	4	0.4	6
Kent III	100 mm, filter	4	0.5	7
Decade	king size, filter, menthol	4	0.4	3
Decade	king size, filter	5	0.4	4
Doral II	king size, filter	5	0.4	4
True	king size, filter	5	0.4	6
True	king size, filter, menthol	5	0.4	6
Doral II	king size, filter, menthol	5	0.4	5
Vantage Ultra Lights	king size, filter	6	0.5	9
Pall Mall Extra Lights	king size, filter	7	0.6	8
Tempo	king size, filter	7	0.6	9
Tareyton Lights *	king size, filter	7	0.6	9
Tareyton Long Lights *	100 mm, filter	7	0.6	9
Kool Super Lights *	king size, filter, menthol	7	0.6	9
Merit	king size, filter, menthol	7	0.5	11
Brookwood	king size, filter, menthol	7	0.7	8
Lark Lights 100's	100 mm, filter	7	0.6	8
Lark Lights	king size, filter	8	0.6	8
Golden Lights	king size, filter, menthol	8	0.7	9
L & M Lights	king size, filter	8	0.7	6
American Lights	120 mm, filter	8	0.7	9
Merit *	king size, filter	8	0.6	12
Lark II	king size, filter	8	0.6	8
L & M Lights	100 mm, filter	8	0.7	6
Balair	100 mm, filter, menthol	8	0.7	10
Viceroy Rich Lights	100 mm, filter	8	0.7	12
Arctic Lights	king size, filter, menthol	8	0.7	10
Golden Lights	king size, filter	8	0.8	9
Viceroy Rich Lights	king size, filter	8	0.7	11
Virginia Slims Lights	100 mm, filter, (hard pack)	8	0.6	10
Raleigh Lights 100's	100 mm, filter	8	0.8	12
Parliament Light	king size, filter, (hard pack)	8	0.6	10
Kool Super Lights	100 mm, filter, menthol	8	0.7	11

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059423

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187)
Varieties of Domestic Cigarettes
(shown in increasing order of tar values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Arctic Lights	100 mm, filter, menthol	8	0.7	11
Lucky Ten	king size, filter	8	0.6	11
Raleigh Lights	king size, filter	9	0.7	11
Kool International	100 mm, filter, (hard pack)	9	0.7	11
Golden Lights 100's	100 mm, filter, menthol	9	0.8	10
Aspen	100 mm, filter, menthol	9	0.8	10
Golden Lights 100's	100 mm, filter	9	0.8	9
Decade	100 mm, filter	9	0.7	8
Virginia Slims Lights *	100 mm, filter, menthol, (hard pack)	9	0.7	11
Real	king size, filter, menthol	9	0.8	10
Aspen	king size, filter, menthol	9	0.8	11
American Lights	120 mm, filter, menthol	9	0.8	10
True	100 mm, filter	9	0.7	12
Belair	king size, filter, menthol	9	0.8	11
Parliament Light	king size, filter	9	0.7	11
Merit	100 mm, filter	9	0.7	12
Old Gold Lights	king size, filter	9	0.8	11
Real	king size, filter	10	0.9	12
Benson & Hedges Lights	100 mm, filter	10	0.8	14
Newport Lights	king size, filter, menthol	10	0.9	12
True	100 mm, filter, menthol	10	0.7	13
Benson & Hedges Lights	100 mm, filter, menthol	10	0.8	13
Merit	100 mm, filter, menthol	10	0.8	13
Camel Lights *	king size, filter	10	0.9	12
Vantage *	king size, filter, menthol	10	0.8	17
Vantage *	king size, filter	10	0.8	17
Marlboro Lights	100 mm, filter	11	0.8	15
Salem Lights *	king size, filter, menthol	11	0.9	14
Vantage *	100 mm, filter	11	0.9	16
Marlboro Lights *	king size, filter	11	0.8	14
Multifilter	king size, filter	11	0.8	12
Salem Lights	100 mm, filter, menthol	11	1.0	13
Pall Mall Lights *	100 mm, filter	11	0.9	13
Silva Thins	100 mm, filter, menthol	11	0.9	11
Parliament Light 100's	100 mm, filter	11	0.9	12
Kool Milds *	king size, filter, menthol	12	0.9	14
Multifilter	king size, filter, menthol	12	0.8	13
Doral	king size, filter, menthol	12	0.9	12
Pall Mall Lights	100 mm, filter, menthol	12	1.0	13
Eve	120 mm, filter, menthol, (hard pack)	12	1.0	12
Camel Long Lights	100 mm, filter	12	1.0	16
Kent Micronite II	king size, filter, (hard pack)	12	1.0	13
Kool Milds 100's	100 mm, filter, menthol	12	1.0	15
Doral	king size, filter	12	0.9	12
Kent Micronite II	king size, filter	12	1.0	14
Winston Lights 100's	100 mm, filter	13	1.0	17
Silva Thins	100 mm, filter	13	1.1	12
Winston Lights *	king size, filter	13	1.1	15
Eve	120 mm, filter, (hard pack)	14	1.1	14
Tareyton	100 mm, filter	14	1.0	18

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059424

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-hundred Eighty-Seven (187) Varieties of Domestic Cigarettes
(shown in increasing order of carbon monoxide values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
L & M	100 mm, filter, menthol	16	1.1	18
Tall	120 mm, filter, menthol	15	1.2	18
Winston	king size, filter, (hard pack)	18	1.3	18
Chesterfield *	101 mm, filter	16	1.1	18
Camel *	reg. size, non-filter	25	1.9	18
Pall Mall	100 mm, filter	17	1.3	19
Salem	king size, filter, menthol, (hard pack)	16	1.2	19
Max	120 mm, filter, menthol	18	1.5	19
Pall Mall	king size, non-filter	24	1.5	19
Kool	king size, filter, menthol	15	1.2	19
Salem *	king size, filter, menthol	16	1.1	19
Lucky Strike	reg. size, non-filter	23	1.3	19
Viceroy	king size, filter	15	1.0	19
Raleigh	king size, non-filter	23	1.4	19
Philip Morris International	100 mm, filter, menthol, (hard pack)	17	1.1	19
DuMaurier	king size, filter, (hard pack)	14	1.0	19
Spring 100's	100 mm, filter, menthol	19	1.1	19
Old Gold Straight	king size, non-filter	25	1.6	19
Lark *	100 mm, filter	17	1.2	19
Old Gold Filters	king size, filter	17	1.3	19
Raleigh	king size, filter	15	1.0	19
Kool	100 mm, filter, menthol	15	1.1	19
Newport	king size, filter, menthol	17	1.3	19
Long Johns	120 mm, filter	16	1.3	19
Pall Mall	king size, filter	17	1.1	19
Fatima	king size, non-filter	26	1.7	20
Viceroy	100 mm, filter	15	1.1	20
Philip Morris International	100 mm, filter, (hard pack)	17	1.2	20
Chesterfield *	king size, non-filter	27	1.7	20
Salem *	100 mm, filter, menthol	19	1.5	20
Old Gold 100's	100 mm, filter	18	1.5	20
Herbert Tareyton	king size, non-filter	27	1.7	20
Raleigh	100 mm, filter	16	1.1	20
Winston 100's *	100 mm, filter	18	1.4	20
Tall	120 mm, filter	16	1.3	21
Camel *	king size, filter	19	1.4	21
Winston *	king size, filter	19	1.4	21
Home Run	reg. size, non-filter	21	1.3	21
Picayune	reg. size, non-filter	22	1.4	22
Newport	100 mm, filter, menthol	20	1.6	23
More	120 mm, filter	22	1.7	26
More	120 mm, filter, menthol	22	1.8	26
Bull Durham	king size, filter	27	1.8	26

* These cigarette brands have been reformulated. See accompanying text.
1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059425

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187) Varieties of Domestic Cigarettes
(shown in increasing order of tar values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Tareyton	king size, filter	14	0.9	17
St. Moritz	100 mm, filter, menthol	14	1.1	15
Marlboro	king size, filter, menthol	14	0.9	16
Kent Micronite II	100 mm, filter, menthol	14	1.2	15
DuMaurier	king size, filter, (hard pack)	14	1.0	19
Long Johns	120 mm, filter, menthol	14	1.2	18
Virginia Slims	100 mm, filter, menthol	14	1.0	16
Marlboro	king size, filter, menthol, (hard pack)	14	1.0	15
Kent Micronite II	100 mm, filter	15	1.1	15
Eve	100 mm, filter, menthol	15	1.1	16
St. Moritz *	100 mm, filter	15	1.1	16
Chesterfield *	king size, filter	15	1.0	17
Viceroy	king size, filter	15	1.0	19
Alpine	king size, filter, menthol	15	1.0	16
Saratoga	120 mm, filter, menthol, (hard pack)	15	1.1	17
Virginia Slims	100 mm, filter	15	1.0	16
L & M	king size, filter, (hard pack)	15	1.0	17
Tall	120 mm, filter, menthol	15	1.2	18
Eve	100 mm, filter	15	1.1	17
Kool	100 mm, filter, menthol	15	1.1	19
Raleigh	king size, filter	15	1.0	19
L & M *	king size, filter	15	1.0	17
Saratoga	120 mm, filter, (hard pack)	15	1.1	18
Viceroy	100 mm, filter	15	1.1	20
Newport	king size, filter, menthol, (hard pack)	15	1.2	18
Kool	king size, filter, menthol	15	1.2	19
Benson & Hedges 100's	100 mm, filter, (hard pack)	15	1.1	17
Oasis *	king size, filter, menthol	16	1.1	17
Marlboro	king size, filter, (hard pack)	16	1.0	16
Benson & Hedges	king size, filter, (hard pack)	16	1.3	14
Marlboro	100 mm, filter, (hard pack)	16	1.1	17
L & M *	100 mm, filter	16	1.1	18
Montclair	king size, filter, menthol	16	1.0	18
Benson & Hedges 100's	100 mm, filter, menthol	16	1.1	18
Twist	100 mm, filter, lemon/menthol	16	1.2	18
Benson & Hedges 100's	100 mm, filter, menthol, (hard pack)	16	1.3	18
Marlboro	100 mm, filter	16	1.1	18
Benson & Hedges 100's	100 mm, filter	16	1.1	18
Lark *	king size, filter	16	1.1	17
Raleigh	100 mm, filter	16	1.1	20
Kool	king size, filter, menthol, (hard pack)	16	1.3	18
Chesterfield *	101 mm, filter	16	1.1	18
Galaxy	king size, filter	16	1.0	18
Salem *	king size, filter, menthol	16	1.1	19
Marlboro	king size, filter	16	1.1	18
Salem	king size, filter, menthol, (hard pack)	16	1.2	19
L & M	100 mm, filter, menthol	16	1.1	18

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059426

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187)
Varieties of Domestic Cigarettes
(shown in increasing order of tar values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Tall	120 mm, filter	16	1.3	21
Long Johns	120 mm, filter	16	1.3	19
Old Gold Filters	king size, filter	17	1.3	19
Newport	king size, filter, menthol	17	1.3	19
Pall Mall	king size, filter	17	1.1	19
Lark *	100 mm, filter	17	1.2	19
Pall Mall	100 mm, filter	17	1.3	19
Philip Morris International	100 mm, filter, menthol, (hard pack)	17	1.1	19
Winston	100 mm, filter, menthol	17	1.3	18
Max	120 mm, filter	17	1.5	18
Philip Morris International	100 mm, filter, (hard pack)	17	1.2	20
Winston	king size, filter, (hard pack)	18	1.3	18
Max	120 mm, filter, menthol	18	1.5	19
Kool	reg. size, non-filter, menthol	18	1.1	15
Winston 100's *	100 mm, filter	18	1.4	20
Old Gold 100's	100 mm, filter	18	1.5	20
Spring 100's	100 mm, filter, menthol	19	1.1	19
Camel *	king size, filter	19	1.4	21
Salem *	100 mm, filter, menthol	19	1.5	20
Winston *	king size, filter	19	1.4	21
Newport	100 mm, filter, menthol	20	1.6	23
Half & Half *	king size, filter	20	1.6	18
Home Run	reg. size, non-filter	21	1.3	21
More	120 mm, filter, menthol	22	1.8	26
Philip Morris	reg. size, non-filter	22	1.5	14
Piedmont	reg. size, non-filter	22	1.3	15
More	120 mm, filter	22	1.7	26
English Ovals	reg. size, non-filter, (hard pack)	22	1.7	13
Picayune	reg. size, non-filter	22	1.4	22
Lucky Strike	reg. size, non-filter	23	1.3	19
Chesterfield *	reg. size, non-filter	23	1.4	16
Raleigh	king size, non-filter	23	1.4	19
Pall Mall	king size, non-filter	24	1.5	19
Players	reg. size, non-filter, (hard pack)	24	1.9	15
Camel *	reg. size, non-filter	25	1.9	18
Old Gold Straight	king size, non-filter	25	1.6	19
Philip Morris Commander	king size, non-filter	25	1.7	17
Fatima	king size, non-filter	26	1.7	20
Herbert Tareyton	king size, non-filter	27	1.7	20
Chesterfield *	king size, non-filter	27	1.7	20
Bull Durham	king size, filter	27	1.8	26
English Ovals	king size, non-filter, (hard pack)	28	2.3	16

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059427

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187) Varieties of Domestic Cigarettes
(shown in increasing order of nicotine values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Carlton	king size, filter, (hard pack)	<0.5	0.06	0.5
Carlton	king size, filter, menthol	1	0.1	1
Benson & Hedges	reg. size, filter, (hard pack)	1	0.1	1
Carlton *	king size, filter	1	0.1	2
Tareyton Ultra Low Tar	king size, filter, menthol	1	0.2	1
Now	king size, filter, (hard pack)	2	0.2	3
Now	king size, filter, menthol, (hard pack)	2	0.2	3
Now	king size, filter, menthol	2	0.2	3
Now	king size, filter	2	0.3	3
Iceberg 100's	100 mm, filter, menthol	3	0.3	5
Lucky 100's	100 mm, filter	3	0.3	5
Kent III	king size, filter	3	0.3	4
Triumph	king size, filter, menthol	3	0.4	3
Carlton 100's	100 mm, filter, menthol	4	0.4	6
Triumph	king size, filter	3	0.4	4
Carlton 100's	100 mm, filter	4	0.4	6
Decade	king size, filter, menthol	4	0.4	3
Decade	king size, filter	5	0.4	4
Doral II	king size, filter	5	0.4	4
True	king size, filter	5	0.4	6
Doral II	king size, filter, menthol	5	0.4	5
True	king size, filter, menthol	5	0.4	6
Kent III	100 mm, filter	4	0.5	7
Vantage Ultra Lights	king size, filter	6	0.5	9
Merit	king size, filter, menthol	7	0.5	11
Tempo	king size, filter	7	0.6	9
Merit *	king size, filter	8	0.6	12
Pall Mall Extra Lights	king size, filter	7	0.6	8
Kool Super Lights *	king size, filter, menthol	7	0.6	9
Lark Lights	king size, filter	8	0.6	8
Tareyton Lights *	king size, filter	7	0.6	9
Parliament Light	king size, filter, (hard pack)	8	0.6	10
Lark Lights 100's	100 mm, filter	7	0.6	8
Virginia Slims Lights	100 mm, filter, (hard pack)	8	0.6	10
Lark II	king size, filter	8	0.6	8
Lucky Ten	king size, filter	8	0.6	11
Tareyton Long Lights *	100 mm, filter	7	0.6	9
Belair	100 mm, filter, menthol	8	0.7	10
Virginia Slims Lights *	100 mm, filter, menthol, (hard pack)	9	0.7	11
American Lights	120 mm, filter	8	0.7	9
Golden Lights	king size, filter, menthol	8	0.7	9
Kool Super Lights	100 mm, filter, menthol	8	0.7	11
L & M Lights	king size, filter	8	0.7	6
Kool International	100 mm, filter, menthol, (hard pack)	9	0.7	11
True	100 mm, filter	9	0.7	12
Arctic Lights	king size, filter, menthol	8	0.7	10
Viceroy Rich Lights	king size, filter	8	0.7	11
True	100 mm, filter, menthol	10	0.7	13

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059428

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187) Varieties of Domestic Cigarettes
(shown in increasing order of nicotine values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Raleigh Lights	king size, filter	9	0.7	11
Brookwood	king size, filter, menthol	7	0.7	8
Viceroy Rich Lights	100 mm, filter	8	0.7	12
Parliament Light	king size, filter	9	0.7	11
Merit	100 mm, filter	9	0.7	12
L & M Lights	100 mm, filter	8	0.7	6
Arctic Lights	100 mm, filter, menthol	8	0.7	11
Decade	100 mm, filter	9	0.7	8
Merit	100 mm, filter, menthol	10	0.8	13
Benson & Hedges Lights	100 mm, filter, menthol	10	0.8	13
Raleigh Lights 100's	100 mm, filter	8	0.8	12
Benson & Hedges Lights	100 mm, filter	10	0.8	14
Golden Lights	king size, filter	8	0.8	9
Multifilter	king size, filter, menthol	12	0.8	13
Marlboro Lights	100 mm, filter	11	0.8	15
Golden Lights 100's	100 mm, filter	9	0.8	9
Golden Lights 100's	100 mm, filter, menthol	9	0.8	10
Real	king size, filter, menthol	9	0.8	10
Vantage *	king size, filter, menthol	10	0.8	17
Multifilter	king size, filter	11	0.8	12
Old Gold Lights	king size, filter	9	0.8	11
Aspen	king size, filter, menthol	9	0.8	11
Vantage *	king size, filter	10	0.8	17
Marlboro Lights *	king size, filter	11	0.8	14
Belair	king size, filter, menthol	9	0.8	11
American Lights	120 mm, filter, menthol	9	0.8	10
Aspen	100 mm, filter, menthol	9	0.8	10
Newport Lights	king size, filter, menthol	10	0.9	12
Real	king size, filter	10	0.9	12
Salem Lights *	king size, filter, menthol	11	0.9	14
Kool Milds *	king size, filter, menthol	12	0.9	14
Pall Mall Lights *	100 mm, filter	11	0.9	13
Camel Lights *	king size, filter	10	0.9	12
Silva Thins	100 mm, filter, menthol	11	0.9	11
Parliament Light 100's	100 mm, filter	11	0.9	12
Vantage *	100 mm, filter	11	0.9	16
Marlboro	king size, filter, menthol	14	0.9	16
Tareyton	king size, filter	14	0.9	17
Doral	king size, filter	12	0.9	12
Doral	king size, filter, menthol	12	0.9	12
Kent Micronite II	king size, filter, (hard pack)	12	1.0	13
Alpine	king size, filter, menthol	15	1.0	16
Marlboro	king size, filter, menthol, (hard pack)	14	1.0	15
Tareyton	100 mm, filter	14	1.0	18
DuMaurier	king size, filter, (hard pack)	14	1.0	19
Camel Long Lights	100 mm, filter	12	1.0	16
Salem Lights	100 mm, filter, menthol	11	1.0	13
Pall Mall Lights	100 mm, filter, menthol	12	1.0	13

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059429

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187) Varieties of Domestic Cigarettes
(shown in increasing order of nicotine values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Eve	120 mm, filter, menthol, (hard pack)	12	1.0	12
L & M	king size, filter, (hard pack)	15	1.0	17
Winston Lights 100's	100 mm, filter	13	1.0	17
Raleigh	king size, filter	15	1.0	19
Virginia Slims	100 mm, filter, menthol	14	1.0	16
Virginia Slims	100 mm, filter	15	1.0	16
Viceroy	king size, filter	15	1.0	19
Kent Micronite II	king size, filter	12	1.0	14
Chesterfield *	king size, filter	15	1.0	17
L & M *	king size, filter	15	1.0	17
Galaxy	king size, filter	16	1.0	18
Marlboro	king size, filter, (hard pack)	16	1.0	16
Montclair	king size, filter, menthol	16	1.0	18
Kool Milds 100's	100 mm, filter, menthol	12	1.0	15
Winston Lights *	king size, filter	13	1.1	15
Eve	120 mm, filter, (hard pack)	14	1.1	14
Saratoga	120 mm, filter, menthol, (hard pack)	15	1.1	17
Eve	100 mm, filter, menthol	15	1.1	16
Silva Thins	100 mm, filter	13	1.1	12
St. Moritz	100 mm, filter, menthol	14	1.1	15
Oasis *	king size, filter, menthol	16	1.1	17
Marlboro	king size, filter	16	1.1	18
Marlboro	100 mm, filter	16	1.1	18
St. Moritz *	100 mm, filter	15	1.1	16
L & M *	100 mm, filter	16	1.1	18
Benson & Hedges 100's	100 mm, filter, (hard pack)	15	1.1	17
Lark *	king size, filter	16	1.1	17
Kool	100 mm, filter, menthol	15	1.1	19
Pall Mall	king size, filter	17	1.1	19
Marlboro	100 mm, filter, (hard pack)	16	1.1	17
Benson & Hedges 100's	100 mm, filter, menthol, (hard pack)	16	1.1	18
Spring 100's	100 mm, filter, menthol	19	1.1	19
Chesterfield *	101 mm, filter	16	1.1	18
Philip Morris International	100 mm, filter, menthol, (hard pack)	17	1.1	19
Saratoga	120 mm, filter, (hard pack)	15	1.1	18
Kool	reg. size, non-filter, menthol	18	1.1	15
Benson & Hedges 100's	100 mm, filter	16	1.1	18
Eve	100 mm, filter	15	1.1	17
L & M	100 mm, filter, menthol	16	1.1	18
Raleigh	100 mm, filter	16	1.1	20
Kent Micronite II	100 mm, filter	15	1.1	15
Viceroy	100 mm, filter	15	1.1	20
Salem *	king size, filter, menthol	16	1.1	19
Benson & Hedges 100's	100 mm, filter, menthol	16	1.1	18
Salem	king size, filter, menthol, (hard pack)	16	1.2	19
Newport	king size, filter, menthol, (hard pack)	15	1.2	18
Lark *	100 mm, filter	17	1.2	19
Kool	king size, filter, menthol	15	1.2	19

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059430

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187) Varieties of Domestic Cigarettes
(shown in increasing order of nicotine values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Philip Morris International	100 mm, filter, (hard pack)	17	1.2	20
Kent Micronite II	100 mm, filter, menthol	14	1.2	15
Long Johns	120 mm, filter, menthol	14	1.2	18
Tall	120 mm, filter, menthol	15	1.2	18
Twist	100 mm, filter, lemon/menthol	16	1.2	18
Pall Mall	100 mm, filter	17	1.3	19
Old Gold Filters	king size, filter	17	1.3	19
Kool	king size, filter, menthol, (hard pack)	16	1.3	18
Home Run	reg. size, non-filter	21	1.3	21
Winston	king size, filter, (hard pack)	18	1.3	18
Newport	king size, filter, menthol	17	1.3	19
Piedmont	reg. size, non-filter	22	1.3	15
Benson & Hedges	king size, filter, (hard pack)	16	1.3	14
Winston	100 mm, filter, menthol	17	1.3	18
Lucky Strike	reg. size, non-filter	23	1.3	19
Long John	120 mm, filter	16	1.3	19
Tall	120 mm, filter	16	1.3	21
Raleigh	king size, non-filter	23	1.4	19
Camel *	king size, filter	19	1.4	21
Picayune	reg. size, non-filter	22	1.4	22
Winston 100's *	100 mm, filter	18	1.4	20
Chesterfield *	reg. size, non-filter	23	1.4	16
Winston *	king size, filter	19	1.4	21
Salem *	100 mm, filter, menthol	19	1.5	20
Old Gold 100's	100 mm, filter	18	1.5	20
Philip Morris	reg. size, non-filter	22	1.5	14
Pall Mall	king size, non-filter	24	1.5	19
Max	120 mm, filter	17	1.5	18
Max	120 mm, filter, menthol	18	1.5	19
Newport	100 mm, filter, menthol	20	1.6	23
Old Gold Straights	king size, non-filter	25	1.6	19
Half & Half *	king size, filter	20	1.6	18
Philip Morris Commander	king size, non-filter	25	1.7	17
Fatima	king size, non-filter	26	1.7	20
Chesterfield *	king size, non-filter	27	1.7	20
Herbert Tareyton	king size, non-filter	27	1.7	20
English Ovals	reg. size, non-filter, (hard pack)	22	1.7	13
More	120 mm, filter	22	1.7	26
More	120 mm, filter, menthol	22	1.8	26
Bull Durham	king size, filter	27	1.8	26
Camel *	reg. size, non-filter	25	1.9	18
Players	reg. size, non-filter, (hard pack)	24	1.9	15
English Ovals	king size, non-filter, (hard pack)	28	2.3	16

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059431

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187)
Varieties of Domestic Cigarettes
(shown in increasing order of carbon monoxide values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Carlton	king size, filter, (hard pack)	<0.5	0.06	0.5
Benson & Hedges	reg. size, filter, (hard pack)	1	0.1	1
Carlton	king size, filter, menthol	1	0.1	1
Tareyton Ultra Low Tar	king size, filter, menthol	1	0.2	1
Carlton *	king size, filter	1	0.1	2
Now	king size, filter, (hard pack)	2	0.2	3
Now	king size, filter, menthol, (hard pack)	2	0.2	3
Now	king size, filter, menthol	2	0.2	3
Now	king size, filter	2	0.3	3
Triumph	king size, filter, menthol	3	0.4	3
Decade	king size, filter, menthol	4	0.4	3
Kent III	king size, filter	3	0.3	4
Decade	king size, filter	5	0.4	4
Triumph	king size, filter	3	0.4	4
Doral II	king size, filter	5	0.4	4
Doral II	king size, filter, menthol	5	0.4	5
Iceberg 100's	100 mm, filter, menthol	3	0.3	5
Lucky 100's	100 mm, filter	3	0.3	5
L & M Lights	king size, filter	8	0.7	6
True	king size, filter	5	0.4	6
Carlton 100's	100 mm, filter, menthol	4	0.4	6
True	king size, filter, menthol	5	0.4	6
L & M Lights	100 mm, filter	8	0.7	6
Carlton 100's	100 mm, filter	4	0.4	6
Kent III	100 mm, filter	4	0.5	7
Decade	100 mm, filter	9	0.7	8
Pall Mall Extra Lights	king size, filter	7	0.6	8
Lark Lights 100's	100 mm, filter	7	0.6	8
Brookwood	king size, filter, menthol	7	0.7	8
Lark II	king size, filter	8	0.6	8
Lark Lights	king size, filter	8	0.6	8
American Lights	120 mm, filter	8	0.7	9
Kool Super Lights *	king size, filter, menthol	7	0.6	9
Golden Lights	king size, filter, menthol	8	0.7	9
Tareyton Lights *	king size, filter	7	0.6	9
Tareyton Long Lights *	100 mm, filter	7	0.6	9
Golden Lights	king size, filter	8	0.8	9
Tempo	king size, filter	7	0.6	9
Golden Lights 100's	100 mm, filter	9	0.8	9
Vantage Ultra Lights	king size, filter	6	0.5	9
Virginia Slims Lights	100 mm, filter, (hard pack)	8	0.6	10
American Lights	120 mm, filter, menthol	9	0.8	10
Real	king size, filter, menthol	9	0.8	10
Golden Lights 100's	100 mm, filter, menthol	9	0.8	10
Parliament Light	king size, filter, (hard pack)	8	0.6	10
Belair	100 mm, filter, menthol	8	0.7	10
Aspen	100 mm, filter, menthol	9	0.8	10
Arctic Lights	king size, filter, menthol	8	0.7	10

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059432

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred eighty-Seven (187) Varieties of Domestic Cigarettes
(shown in increasing order of carbon monoxide values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Viceroy Rich Lights	king size, filter	8	0.7	11
Arctic Lights	100 mm, filter, menthol	8	0.7	11
Old Gold Lights	king size, filter	9	0.8	11
Kool Super Lights	100 mm, filter, menthol	8	0.7	11
Lucky Ten	king size, filter	8	0.6	11
Kool International	100 mm, filter, menthol, (hard pack)	9	0.7	11
Virginia Slims Lights *	100 mm, filter, menthol, (hard pack)	9	0.7	11
Aspen	king size, filter, menthol	9	0.8	11
Raleigh Lights	king size, filter	9	0.7	11
Parliament Light	king size, filter	9	0.7	11
Belair	king size, filter, menthol	9	0.8	11
Silva Thins	100 mm, filter, menthol	11	0.9	11
Merit	king size, filter, menthol	7	0.5	11
Merit *	king size, filter	8	0.6	12
Newport Lights	king size, filter, menthol	10	0.9	12
Parliament Light 100's	100 mm, filter	11	0.9	12
Real	king size, filter	10	0.9	12
Raleigh Lights 100's	100 mm, filter	8	0.8	12
Silva Thins	100 mm, filter	13	1.1	12
Viceroy Rich Lights	100 mm, filter	8	0.7	12
Multifilter	king size, filter	11	0.8	12
True	100 mm, filter	9	0.7	12
Camel Lights *	king size, filter	10	0.9	12
Doral	king size, filter, menthol	12	0.9	12
Doral	king size, filter	12	0.9	12
Eve	120 mm, filter, menthol, (hard pack)	12	1.0	12
Merit	100 mm, filter	9	0.7	12
Multifilter	king size, filter, menthol	12	0.8	13
Salem Lights	100 mm, filter, menthol	11	1.0	13
Pall Mall Lights *	100 mm, filter	11	0.9	13
Benson & Hedges Lights	100 mm, filter, menthol	10	0.8	13
Merit	100 mm, filter, menthol	10	0.8	13
Kent Micronite II	king size, filter, (hard pack)	12	1.0	13
True	100 mm, filter, menthol	10	0.7	13
English Ovals	reg. size, non-filter, (hard pack)	22	1.7	13
Pall Mall Lights	100 mm, filter, menthol	12	1.0	13
Kent Micronite II	king size, filter	12	1.0	14
Eve	120 filter, (hard pack)	14	1.1	14
Benson & Hedges Lights	100 mm, filter	10	0.8	14
Philip Morris	reg. size, non-filter	22	1.5	14
Salem Lights *	king size, filter, menthol	11	0.9	14
Marlboro Lights *	king size, filter	11	0.8	14
Kool Milds *	king size, filter, menthol	12	0.9	14
Benson & Hedges	king size, filter, (hard pack)	16	1.3	14
Kool Milds 100's	100 mm, filter, menthol	12	1.0	15
Marlboro	king size, filter, menthol, (hard pack)	14	1.0	15
Kent Micronite II	100 mm, filter, menthol	14	1.2	15
Marlboro Lights	100 mm, filter	11	0.8	15

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059433

Source: https://www.industrydocuments.ucsf.edu/docs/slkk0001

Tar[1], Nicotine and Carbon Monoxide Content of One-Hundred Eighty-Seven (187)
Varieties of Domestic Cigarettes
(shown in increasing order of carbon monoxide values)

BRAND	TYPE	TAR (mg/cig)	NICOTINE (mg/cig)	CARBON MONOXIDE (mg/cig)
Piedmont	reg. size, non-filter	22	1.3	15
Kent Micronite II	100 mm, filter	15	1.1	15
St. Moritz	100 mm, filter, menthol	14	1.1	15
Winston Lights *	king size, filter	13	1.1	15
Players	reg. size, non-filter, (hard pack)	24	1.9	15
Kool	reg. size, non-filter, menthol	18	1.1	15
English Ovals	king size, non-filter, (hard pack)	28	2.3	16
Marlboro	king size, filter, menthol	14	0.9	16
St. Moritz *	100 mm, filter	15	1.1	16
Camel Long Lights	100 mm, filter	12	1.0	16
Alpine	king size, filter, menthol	15	1.0	16
Virginia Slims	100 mm, filter	15	1.0	16
Virginia Slims	100 mm, filter, menthol	14	1.0	16
Chesterfield *	reg. size, non-filter	23	1.4	16
Eve	100 mm, filter, menthol	15	1.1	16
Vantage *	100 mm, filter	11	0.9	16
Marlboro	king size, filter, (hard pack)	16	1.0	16
Chesterfield *	king size, filter	15	1.0	17
Winston Lights 100's	100 mm, filter	13	1.0	17
Vantage *	king size, filter	10	0.8	17
Oasis *	king size, filter, menthol	16	1.1	17
Saratoga	120 mm, filter, menthol, (hard pack)	15	1.1	17
Philip Morris Commander	king size, non-filter	25	1.7	17
L & M	king size, filter, (hard pack)	15	1.0	17
Vantage *	king size, filter, menthol	10	0.8	17
Marlboro	100 mm, filter, (hard pack)	16	1.1	17
Eve	100 mm, filter	15	1.1	17
Taryeton	king size, filter	14	0.9	17
Lark *	king size, filter	16	1.1	17
Benson & Hedges 100's	100 mm, filter, (hard pack)	15	1.1	17
L & M *	king size, filter	15	1.0	17
Twist	100 mm, filter, lemon/menthol	16	1.2	18
Newport	king size, filter, menthol, (hard pack)	15	1.2	18
Marlboro	100 mm, filter	16	1.1	18
Benson & Hedges 100's	100 mm, filter	16	1.1	18
Marlboro	king size, filter	16	1.1	18
Montclair	king size, filter, menthol	16	1.0	18
Benson & Hedges 100's	100 mm, filter, menthol, (hard pack)	16	1.1	18
Half & Half *	king size, filter	20	1.6	18
Benson & Hedges 100's	100 mm, filter, menthol	16	1.1	18
Long John	120 mm, filter, menthol	14	1.2	18
Winston	100 mm, filter, menthol	17	1.3	18
Saratoga	120 mm, filter, (hard pack)	15	1.1	18
Tareyton	100 mm, filter	14	1.0	18
Max	120 mm, filter	17	1.5	18
Galaxy	king size, filter	16	1.0	18
L & M *	100 mm, filter	16	1.1	18
Kool	king size, filter, menthol, (hard pack)	16	1.3	18

* These cigarette brands have been reformulated. See accompanying text.

1 TPM dry (tar) - milligrams total particulate matter less nicotine and water

PM3001059434

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